

## REMARKS

The Office Action dated January 11, 2008, has been received and carefully noted. The following remarks are submitted as a full and complete response thereto. Claims 1-24 are currently pending, of which claims 1, 8, 17, and 24 are independent claims.

In view of the following remarks, Applicant respectfully requests reconsideration and timely withdrawal of the pending claim rejections for the reasons discussed below.

### *Claim Rejections under 35 U.S.C. §102(e)*

The Office Action rejected claims 1-24 under 35 U.S.C. §102(e) as allegedly being anticipated by Palenius (U.S. Patent No. 6,904,290) (“Palenius”). The Office Action alleged that Palenius discloses or suggests every feature recited in claims 1-24. Applicant respectfully submits that the claims recite subject matter that is neither disclosed nor suggested in Palenius.

Claim 1, upon which claims 2-7 are dependent, recites a method. The method includes adjusting a target signal-to-interference to match a first data rate applied during a first transmission time interval of a dedicated channel, and performing a comparison between a signal-to-interference measured from the dedicated channel transmitted at the first data rate and the target signal-to-interference. The target signal-to-interference is configured to provide a reference signal-to-interference value for closed-loop power control. A transmit power control command is provided to a transmitter according to the comparison.

Claim 8, upon which claims 9-16 are dependent, recites a system. The system includes an adjusting unit connected to a receiver and configured to adjust a target signal-to-interference ratio to match a first data rate applied during a first transmission time interval of the dedicated channel, and a comparator configured to perform a comparison between a signal-to-interference ratio measured from the dedicated channel transmitted at the first data rate and the target signal-to-interference ratio. The target signal-to-interference ratio is configured to provide a reference signal-to-interference ratio value for closed-loop power control. A transmitter is configured to receive a transmit power control command according to the comparison.

Claim 17, upon which claims 18-23 are dependent, recites an apparatus. The apparatus includes an adjusting unit connected to a receiver configured to adjust a target signal-to-interference ratio to match a first data rate applied during a first transmission time interval of the dedicated channel, and a comparator configured to generate a comparison between a signal-to-interference ratio measured from the dedicated channel transmitted at the first data rate and the target signal-to-interference ratio. The target signal-to-interference ratio is configured to provide a reference signal-to-interference ratio value for closed-loop power control. A transmitter is configured to receive a transmit power control command according to the comparison.

Claim 24 recites an apparatus. The apparatus includes adjusting means, connected to a receiver, for adjusting a target signal-to-interference ratio to match a first data rate applied during a first transmission time interval of the dedicated channel. The target

signal-to-interference ratio is configured to provide a reference signal-to-interference ratio value for closed-loop power control. The apparatus further includes comparing means for generating a comparison between a signal-to-interference ratio measured from the dedicated channel transmitted at the first data rate and the target signal-to-interference ratio. A transmitter is configured to receive a transmit power control command according to the comparison.

As will be discussed below, Palenius fails to disclose or suggest every claim feature recited in claims 1-24, and therefore fails to provide the advantages and features discussed above.

Palenius is directed to a method and apparatus for controlling transmit power, whereby a data rate of at least a first channel is determined, and the transmit power of the at least first channel is controlled based on the determined data rate (Palenius, Abstract; col. 3, lines 37-58).

Applicant respectfully submits that Palenius fails to disclose or suggest every feature recited in claim 1, and similarly recited in claims 8, 17, and 24. Specifically, Palenius fails to disclose or suggest, at least, “adjusting a target signal-to-interference to match a first data rate applied during a first transmission time interval of a dedicated channel, the target signal-to-interference configured to provide a reference signal-to-interference value for closed-loop power control” as recited in claim 1, and similarly recited in claims 8, 17, and 24 (emphasis added).

The Office Action asserted that Palenius discloses the aforementioned claim feature, citing column 3, lines 40-45, 53-55, and 66-67, and column 5, lines 4-7. The Office Action asserted that “Palenius teaches the ratio is adjusted based on the coding rate. The first channel (dedicated channel), data rate is determined, then transmit power (SIR) of the first channel is controlled based on the determined data rate (see col. 3, 40-45)” (See Office Action on page 2 and 7). Applicant respectfully disagrees with the Office Action’s assertions.

Rather, Palenius discloses controlling a *transmit power* of at least a first channel based on a determined data rate. The transmit power may be adjusted based on a ratio of power between the at least a first channel and a second channel, and the ratio may be adjusted based on the data rate of the first data channel. The first channel may be a data channel, and the second channel may be a control channel. The ratio is adjusted such that a power offset between the first channel and the second channel is proportional to the data rate of the first channel. The ratio may be adjusted based on the coding rate, data transmission rate, and/or a rate matching parameter. The transmit power may also be adjusted based on received power control commands. The transmit power may be adjusted in this manner in the uplink or downlink direction (Palenius, col. 3, lines 41-58).

Palenius further discloses first, second, and third decoders 24, 26, 27 used to decode a signal transmitted from the BS 100 and processor 25 used to reconstruct and output conveyed information, e.g. to provide audio and video output of a wirelessly transmitted video conference. The information obtained during the decoding process can

be used to determine the SIR of a signal received by the MS 110 and to perform other quality measurements (Palenius, col. 5, lines 4-6). Palenius further discloses that a SIR is a ratio of the mean power of a received signal to the sum of the power of all interfering signals (col. 1, lines 50-57).

Accordingly, the *transmit power* of at least a first channel is adjusted based on a ratio of power between the at least a first channel and a second channel. The ratio may be adjusted based on the coding rate, data transmission rate, and/or a rate matching parameter. Whereas, a *SIR* of a signal is determined during a decoding process along with other quality measurements.

Applicant respectfully disagrees with the Office Action's assertion that the "transmit power" is synonymous with the "SIR" disclosed in Palenius (See Office Action on pages 2 and 7). One of ordinary skill in the art at the time the invention was made would have understood that the transmit power of a channel is different than a ratio of the mean power of a received signal to the sum of the power of all interfering signals.

Furthermore, although adjusting the *transmit power* of at least a first channel may affect the SIR of the signal, Palenius fails to disclose or suggest the concept of the "targeted SIR" as disclosed in the features recited in claim 1, and similarly recited in claims 8, 17, and 24.

Accordingly, Palenius discloses the determination of the SIR of the signal received by the MS 110, but fails to disclose or suggest adjusting the SIR "to match a first data rate applied during a first transmission time interval of a dedicated channel, the target

signal-to-interference configured to provide a reference signal-to-interference value for closed-loop power control” as recited in claim 1, and similarly recited in claims 8, 17, and 24. Hence, Palenius is silent regarding a target SIR as disclosed in the features recited in claim 1, and similarly recited in claims 8, 17, and 24.

Furthermore, contrary to the Office Action’s assertions, Palenius fails to disclose or suggest, at least, “performing a comparison between a signal-to-interference measured from the dedicated channel transmitted at the first data rate and the target signal-to-interference” as recited in claim 1, and similarly in claims 8, 17, and 24 (emphasis added). The Office Action asserted that Palenius discloses the aforementioned claim features, citing processor 25 and the disclosure at column 3, lines 45-53 (See Office Action on pages 2 and 7). However, a review of these passages demonstrates that Palenius fails to disclose or suggest the aforementioned claim features.

Rather, as previously noted, Palenius discloses first, second, and third decoders 24, 26, 27 used to decode a signal transmitted from the BS 100 and processor 25 used to reconstruct and output conveyed information, e.g. to provide audio and video output of a wirelessly transmitted video conference. The information obtained during the decoding process can be used to determine the SIR of a signal received by the MS 110 and to perform other quality measurements (Palenius, col. 5, lines 4-6). Palenius further discloses that a SIR is a ratio of the mean power of a received signal to the sum of the power of all interfering signals (col. 1, lines 50-57).

Further, Palenius discloses controlling a *transmit power* of at least a first channel based on a determined data rate. The transmit power may be adjusted based on a ratio of power between the at least a first channel and a second channel, and the ratio may be adjusted based on the data rate of the first data channel. The first channel may be a data channel, and the second channel may be a control channel. The ratio is adjusted such that a power offset between the first channel and the second channel is proportional to the data rate of the first channel. The ratio may be adjusted based on the coding rate, data transmission rate, and/or a rate matching parameter. The transmit power may also be adjusted based on received power control commands. The transmit power may be adjusted in this manner in the uplink or downlink direction (Palenius, col. 3, lines 41-58).

Accordingly, Palenius discloses a determination of a SIR measured from a first signal transmitted at a data rate of the first channel, but fails to disclose or suggest, at least, “performing a comparison between a signal-to-interference...and the target signal-to-interference” because as previously noted, Palenius fails to disclose or suggest the target SIR as disclosed in the features recited in claim 1, and similarly recited in claims 8, 17, and 24. Contrary to the Office Action’s assertions, adjusting a power offset between a first channel and the second channel to be proportional to the data rate of the first channel does not disclose or suggest a comparison of a measured SIR and a target SIR.

Accordingly, Palenius fails to disclose or suggest every claim feature recited in claim 1, and similarly recited in claims 8, 17, and 24.

Claims 2-7 depends from claim 1. Claims 9-16 depend from claim 8. Claims 18-23 depend from claim 17. Accordingly, claims 2-7, 9-16, and 18-23 should be allowable for at least their dependency upon an allowable base claim, and for the specific limitations recited therein.

Therefore, Applicant respectfully requests withdrawal of the rejections of claims 1-24 under 35 U.S.C. §102(e), and respectfully submits that claims 1, 8, 17, and 24, and the claims that depend therefrom, are in condition for allowance.

### **CONCLUSION**

In conclusion, Applicant respectfully submits that Palenius fails to disclose or suggest every feature recited in claims 1-24. The distinctions previously noted are more than sufficient to render the claimed invention unanticipated. It is therefore respectfully requested that all of claims 1-24 be allowed, and this present application be passed to issuance.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, Applicant's undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.



In the event this paper is not being timely filed, Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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